

## ABSTRACT OF THE DISCLOSURE

A communication device measures delay profiles by changing a measurement period and a measurement time to appropriate values according to measurement conditions so as to improve transmission quality. A measurement-period holding unit holds for measurement of delay profiles values of the measurement period in correspondence with values indicating one or a combination of a wireless condition or a service quality level. For example, the wireless condition indicates the number of spreading codes, and the service quality level indicates reception quality. A change recognition unit recognizes a change in at least one of the wireless condition and the service quality level, and notifies a measurement-period acquisition unit of the change. The measurement-period acquisition unit acquires from the measurement-period holding unit a value of the measurement period corresponding to the change. A delay-profile measurement unit repeats the measurement of the delay profiles with the measurement period determined by the acquired value.